

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/553,124
Source: JFWO
Date Processed by STIC: 08/25/2006

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 08/25/2006

PATENT APPLICATION: US/10/553,124

TIME: 11:46:05

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw

```

3 <110> APPLICANT: ENDO, NOBORU
4     YOSHIDA, KOUKI
5     AKIYOSHI, MIHO
6     YOSHIDA, YASUKO
7     OHSUMI, CHIEKO
8     IGARASHI, DAISUKE
10 <120> TITLE OF INVENTION: GENE CAPABLE OF IMPARTING SALT STRESS RESISTANCE
12 <130> FILE REFERENCE: 279689US0XPCT
14 <140> CURRENT APPLICATION NUMBER: 10/553,124
15 <141> CURRENT FILING DATE: 2005-10-14
17 <150> PRIOR APPLICATION NUMBER: PCT/JP04/05403
18 <151> PRIOR FILING DATE: 2004-04-15
20 <150> PRIOR APPLICATION NUMBER: JP 2003-113194
21 <151> PRIOR FILING DATE: 2003-04-17
23 <150> PRIOR APPLICATION NUMBER: JP 2004-075932
24 <151> PRIOR FILING DATE: 2004-03-17
26 <160> NUMBER OF SEQ ID NOS: 17
28 <170> SOFTWARE: PatentIn version 3.3
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 1554
32 <212> TYPE: DNA
33 <213> ORGANISM: Seashore Paspalum
36 <220> FEATURE:
37 <221> NAME/KEY: CDS
38 <222> LOCATION: (131)..(1222)
40 <400> SEQUENCE: 1
41 ggcacgagga ggcgcgcgcg cggttgccag acactgccag tgcaacagag ccgcaaaacc      60
43 acacgcccc tcgcgcgctc acacagagag agacacacag atcgatcgag cggccggccg      120
45 gacggcgag atg gcg atc ggc ggg gcg gag gcc ggc ggg gga ggc gcg      169
46     Met Ala Ile Gly Gly Ala Glu Ala Gly Gly Gly Gly Ala
47     1             5             10
49 ggg gcc agc ggc cgg agc gtg ctg gtg acg ggc ggc gcg ggg ttc atc      217
50 Gly Ala Ser Gly Arg Ser Val Leu Val Thr Gly Gly Ala Gly Phe Ile
51     15             20             25
53 ggc acg cac acg gcg ctg cgc ctg ctg gag cag ggc tac ggc gtc acc      265
54 Gly Thr His Thr Ala Leu Arg Leu Leu Glu Gln Gly Tyr Gly Val Thr
55 30             35             40             45
57 gtc gtc gac aac ttc cac aac tcc gtc ccc gag gcg ctc gaa cgc gtc      313
58 Val Val Asp Asn Phe His Asn Ser Val Pro Glu Ala Leu Glu Arg Val
59     50             55             60
61 cgc ctc atc gcc ggg ccc gcg ctc tcc gcc cgc ctc gac ttc atc cgg      361
62 Arg Leu Ile Ala Gly Pro Ala Leu Ser Ala Arg Leu Asp Phe Ile Arg
63     65             70             75

```

RAW SEQUENCE LISTING

DATE: 08/25/2006

PATENT APPLICATION: US/10/553,124

TIME: 11:46:05

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw

```

65 ggg gat ctg agg agc gcc ggg gac ttg gag aag gcg ttc gcg gcc agg      409
66 Gly Asp Leu Arg Ser Ala Gly Asp Leu Glu Lys Ala Phe Ala Ala Arg
67      80      85      90
69 agg tac gac gcc gtc gtc cac ttc gcg ggg ctc aag gcc gtc ggg gag      457
70 Arg Tyr Asp Ala Val Val His Phe Ala Gly Leu Lys Ala Val Gly Glu
71      95      100      105
73 agc gtc gcg cgc ccg gac atg tac tac gag aac aac ctc gcc ggc acc      505
74 Ser Val Ala Arg Pro Asp Met Tyr Tyr Glu Asn Asn Leu Ala Gly Thr
75 110      115      120      125
77 atc aac ctc tac aag gcc atg aac gag cac ggc tgc aag aag atg gtg      553
78 Ile Asn Leu Tyr Lys Ala Met Asn Glu His Gly Cys Lys Lys Met Val
79      130      135      140
81 ttc tcg tcg tcc gcg acc gtg tac ggc tgg ccg gag gtg atc ccg tgc      601
82 Phe Ser Ser Ser Ala Thr Val Tyr Gly Trp Pro Glu Val Ile Pro Cys
83      145      150      155
85 gtc gag gac tcc aag ctg cag gcc gcc aac ccc tac ggc agg acc aag      649
86 Val Glu Asp Ser Lys Leu Gln Ala Ala Asn Pro Tyr Gly Arg Thr Lys
87      160      165      170
89 ctg atc ctg gag gag ttg gcg cgg gac tac cag cgc gcg gag ccg ggc      697
90 Leu Ile Leu Glu Glu Leu Ala Arg Asp Tyr Gln Arg Ala Asp Pro Gly
91      175      180      185
93 tgg agc atc gtc ctg ctg cgc tac ttc aac ccc atc ggc gcc cac agc      745
94 Trp Ser Ile Val Leu Leu Arg Tyr Phe Asn Pro Ile Gly Ala His Ser
95 190      195      200      205
97 tcc ggc gag atc ggc gag gac ccc aag ggg gtg ccc aac aac ctg ctg      793
98 Ser Gly Glu Ile Gly Glu Asp Pro Lys Gly Val Pro Asn Asn Leu Leu
99      210      215      220
101 ccc tac atc cag cag gtc gcc gtc ggc agg ctc ccc gag ctc aac gtc      841
102 Pro Tyr Ile Gln Gln Val Ala Val Gly Arg Leu Pro Glu Leu Asn Val
103      225      230      235
105 tac ggc cac gat tac ccc acc cgt gac ggc acc gcg atc agg gac tac      889
106 Tyr Gly His Asp Tyr Pro Thr Arg Asp Gly Thr Ala Ile Arg Asp Tyr
107      240      245      250
109 ata cac gtc gtc gac ctg gcc gac ggg cac atc gcg gcg ctg aac aag      937
110 Ile His Val Val Asp Leu Ala Asp Gly His Ile Ala Ala Leu Asn Lys
111      255      260      265
113 ctg ttc gac act cct gat ttc ggt tgt gtg gcc tac aat ctg ggc aca      985
114 Leu Phe Asp Thr Pro Asp Phe Gly Cys Val Ala Tyr Asn Leu Gly Thr
115 270      275      280      285
117 ggg cgc ggc aca tcc gtt ctc gag atg gtg gcg gcg ttc aag aag gca      1033
118 Gly Arg Gly Thr Ser Val Leu Glu Met Val Ala Ala Phe Lys Lys Ala
119      290      295      300
121 tcc ggc aag gag atc ccc acc aag atg tgc ccc agg aga ccg ggt gac      1081
122 Ser Gly Lys Glu Ile Pro Thr Lys Met Cys Pro Arg Arg Pro Gly Asp
123      305      310      315
125 gcg acg gag gtt tac gcg tcc act gag aag gcc gaa agg gag ctc gga      1129
126 Ala Thr Glu Val Tyr Ala Ser Thr Glu Lys Ala Glu Arg Glu Leu Gly
127      320      325      330
129 tgg agg gcc cag tat gga atc gag gag atg tgc agg gac cag tgg aac      1177

```

RAW SEQUENCE LISTING

DATE: 08/25/2006

PATENT APPLICATION: US/10/553,124

TIME: 11:46:05

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw

```

130 Trp Arg Ala Gln Tyr Gly Ile Glu Glu Met Cys Arg Asp Gln Trp Asn
131      335                      340                      345
133 tgg gcc aag aag aac ccc tat ggc tac tgc ggc act gcc gaa aaa      1222
134 Trp Ala Lys Lys Asn Pro Tyr Gly Tyr Cys Gly Thr Ala Glu Lys
135 350                      355                      360
137 tagagcgcgt gcattaatca gatctctgga ctgaatttgt ccatgggttga tggttgtctc      1282
139 agacctatcg gtggaagatg taacaagtag agaccgctcg aatgtgccta gctacgaaag      1342
141 ttctgtacca tctctcttgt cataacctca tgtagatggg cattttattg gaattagcct      1402
143 tagccttcag gcccggcgct gttagccatt gcttgctatc gaggttaggtg gggttggaac      1462
145 ttggggcgcc cttgaacttc cattatcatc attcgcacag acggcacagt tgcgcagtga      1522
147 gccgttgact gcttgtgaaa aaaaaaaaaa aa      1554
150 <210> SEQ ID NO: 2
151 <211> LENGTH: 364
152 <212> TYPE: PRT
153 <213> ORGANISM: Seashore Paspalum
155 <400> SEQUENCE: 2
157 Met Ala Ile Gly Gly Ala Glu Ala Gly Gly Gly Gly Ala Gly Ala Ser
158 1      5      10      15
161 Gly Arg Ser Val Leu Val Thr Gly Gly Ala Gly Phe Ile Gly Thr His
162      20      25      30
165 Thr Ala Leu Arg Leu Leu Glu Gln Gly Tyr Gly Val Thr Val Val Asp
166      35      40      45
169 Asn Phe His Asn Ser Val Pro Glu Ala Leu Glu Arg Val Arg Leu Ile
170      50      55      60
173 Ala Gly Pro Ala Leu Ser Ala Arg Leu Asp Phe Ile Arg Gly Asp Leu
174 65      70      75      80
177 Arg Ser Ala Gly Asp Leu Glu Lys Ala Phe Ala Ala Arg Arg Tyr Asp
178      85      90      95
181 Ala Val Val His Phe Ala Gly Leu Lys Ala Val Gly Glu Ser Val Ala
182      100     105     110
185 Arg Pro Asp Met Tyr Tyr Glu Asn Asn Leu Ala Gly Thr Ile Asn Leu
186      115     120     125
189 Tyr Lys Ala Met Asn Glu His Gly Cys Lys Lys Met Val Phe Ser Ser
190      130     135     140
193 Ser Ala Thr Val Tyr Gly Trp Pro Glu Val Ile Pro Cys Val Glu Asp
194 145     150     155     160
197 Ser Lys Leu Gln Ala Ala Asn Pro Tyr Gly Arg Thr Lys Leu Ile Leu
198      165     170     175
201 Glu Glu Leu Ala Arg Asp Tyr Gln Arg Ala Asp Pro Gly Trp Ser Ile
202      180     185     190
205 Val Leu Leu Arg Tyr Phe Asn Pro Ile Gly Ala His Ser Ser Gly Glu
206      195     200     205
209 Ile Gly Glu Asp Pro Lys Gly Val Pro Asn Asn Leu Leu Pro Tyr Ile
210      210     215     220
213 Gln Gln Val Ala Val Gly Arg Leu Pro Glu Leu Asn Val Tyr Gly His
214 225     230     235     240
217 Asp Tyr Pro Thr Arg Asp Gly Thr Ala Ile Arg Asp Tyr Ile His Val
218      245     250     255
221 Val Asp Leu Ala Asp Gly His Ile Ala Ala Leu Asn Lys Leu Phe Asp

```

RAW SEQUENCE LISTING

DATE: 08/25/2006

PATENT APPLICATION: US/10/553,124

TIME: 11:46:06

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw

```

222          260          265          270
225 Thr Pro Asp Phe Gly Cys Val Ala Tyr Asn Leu Gly Thr Gly Arg Gly
226          275          280          285
229 Thr Ser Val Leu Glu Met Val Ala Ala Phe Lys Lys Ala Ser Gly Lys
230          290          295          300
233 Glu Ile Pro Thr Lys Met Cys Pro Arg Arg Pro Gly Asp Ala Thr Glu
234 305          310          315          320
237 Val Tyr Ala Ser Thr Glu Lys Ala Glu Arg Glu Leu Gly Trp Arg Ala
238          325          330          335
241 Gln Tyr Gly Ile Glu Glu Met Cys Arg Asp Gln Trp Asn Trp Ala Lys
242          340          345          350
245 Lys Asn Pro Tyr Gly Tyr Cys Gly Thr Ala Glu Lys
246          355          360
249 <210> SEQ ID NO: 3
250 <211> LENGTH: 23
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Synthetic DNA
257 <400> SEQUENCE: 3
258 ggtgcgacga ctctggagc ccg
261 <210> SEQ ID NO: 4
262 <211> LENGTH: 24
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Synthetic DNA
269 <400> SEQUENCE: 4
270 ttgacaccag accaactggt aatg
273 <210> SEQ ID NO: 5
274 <211> LENGTH: 339
275 <212> TYPE: DNA
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: Synthetic DNA
281 <400> SEQUENCE: 5
282 tgccgtgggc tccggcgggt tcgccttcca cgagcaccac gagaagaagg aggaccacaa
284 ggacgccgag gaggccggcg gcgagaagaa gcaccacttc ttcggctgat ccatctcacc
286 atctccatct cccaccccca tcgatccatt tgtgttggt ttaattccct gcgtgcatgc
288 gtgttggtga ataaggggcc ggttccatct gtacgtacgt gtactccgag acctatcgtc
290 atgtgtgtgt gtgtacgtat acctgctgtg tacatgatgg tcgtatatgc cactggacta
292 tgtgtgtgtg caactctgtt ctgatttgct atatataag
295 <210> SEQ ID NO: 6
296 <211> LENGTH: 497
297 <212> TYPE: DNA
298 <213> ORGANISM: Seashore Paspalum
300 <400> SEQUENCE: 6
301 tgcagggacc agtggaaactg ggccaagaag aaccctatg gctactgcgg cactgccgaa
303 aaatagagcg cgtgcattaa tcagatctct ggactgaatt tgtccatggt tgatggttgt

```

RAW SEQUENCE LISTING

DATE: 08/25/2006

PATENT APPLICATION: US/10/553,124

TIME: 11:46:06

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw

```

305 ctcagaccta tcggtggaag atgtaacaag tagagaccgc tcgaatgtgc ctagctacga 180
307 agtttcgtac catctctctt gtcataacct catgtagatg gtcattttat tggaattagc 240
309 cttagccttc aggcccggcg ctgttaaaat ttgttttaca catggatttt ctcgctacgt 300
311 gtgatacata ttgtgtctgt aataatcctg atcggagttt ccagtaataa aaccgatcca 360
313 cgacgggtggc tacgccctgt gttgtagtac tgtgaatatg atgtggtaat aacaataact 420
315 tgcagtgaga cttcagcttt caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
317 aaaaaaaaaa aaaaaaa 497
320 <210> SEQ ID NO: 7
321 <211> LENGTH: 396
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Synthetic DNA
328 <400> SEQUENCE: 7
329 ggccgctgtg cagggaccag tggaactggg ccaagaagaa cccctatggc tactgcggca 60
331 ctgccgaaaa atagagcgcg tgcattaatc agatctctgg actgaatttg tccatggttg 120
333 atggttgtct cagacctatc ggtggaagat gtaacaagta gagaccgctc gaatgtgcct 180
335 agctacgaag ttctgtacca tctctcttgt cataacctca tgtagatggt cattttattg 240
337 gaattagcct tagccttcag gcccggcgtc gttaaaattt gttttacaca tggattttct 300
339 cgctacgtgt gatacatatt gtgtctgtaa taatcctgat cggagtttcc agtaataaaa 360
341 ccgatccacg acggtggcta cgccctgtgt tgtagt 396
344 <210> SEQ ID NO: 8
345 <211> LENGTH: 1540
346 <212> TYPE: DNA
347 <213> ORGANISM: Seashore Paspalum
350 <220> FEATURE:
351 <221> NAME/KEY: CDS
352 <222> LOCATION: (110)..(1183)
354 <400> SEQUENCE: 8
355 ggcacgaggg agagattgag aggaaatcga gttcatcctc cctccaccat cgccgatcat 60
357 agccttcctt tccccgatcg ccgatccgat ccacaagcaa gcagccagg atg gtt tct 118
358 Met Val Ser
359 1
361 gcg gtg ctt cgt acc atc ctt gtg acg ggc ggc gcc ggc tac atc ggc 166
362 Ala Val Leu Arg Thr Ile Leu Val Thr Gly Gly Ala Gly Tyr Ile Gly
363 5 10 15
365 agc cac acc gtg ctg ctg ctg cag cag gga ttc cgc gtc gtc gtc 214
366 Ser His Thr Val Leu Leu Leu Gln Gln Gly Phe Arg Val Val Val
367 20 25 30 35
369 gtc gac aac ctc gac aac gcc tcc gac gtc gcg ctc gcc cgc gtc gcg 262
370 Val Asp Asn Leu Asp Asn Ala Ser Asp Val Ala Leu Ala Arg Val Ala
371 40 45 50
373 cag ctc gca gca agc agc aac ggc ggc gcc gcc aac ctc gtc ttc cac 310
374 Gln Leu Ala Ala Ser Ser Asn Gly Gly Ala Ala Asn Leu Val Phe His
375 55 60 65
377 aag gtt gac ctt cgc gac agg cac gcg ctg gag gac atc ttc tcc tcc 358
378 Lys Val Asp Leu Arg Asp Arg His Ala Leu Glu Asp Ile Phe Ser Ser
379 70 75 80
381 cac agg ttt gag gct gtg att cat ttt gct ggg ctc aaa gct gtt ggc 406

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/553,124

DATE: 08/25/2006

TIME: 11:46:07

Input Set : A:\279689US0XPCT.ST25.txt

Output Set: N:\CRF4\08252006\J553124.raw